

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>PCA513-01DRK</b>	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. <b>PCT/IB 02/ 00647</b>	International filing date (day/month/year) <b>25/02/2002</b>	(Earliest) Priority Date (day/month/year) <b>30/03/2001</b>
Applicant  <b>WARNER-LAMBERT COMPANY</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 6 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

## 1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.



the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :



contained in the international application in written form.



filed together with the international application in computer readable form.



furnished subsequently to this Authority in written form.



furnished subsequently to this Authority in computer readable form.



the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.



the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☒ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,



the text is approved as submitted by the applicant.



the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,



the text is approved as submitted by the applicant.



the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.



as suggested by the applicant.



because the applicant failed to suggest a figure.



because this figure better characterizes the invention.

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None of the figures.

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB 02/00647

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K47/48 A61K31/7056 C07H19/04

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, EMBASE, CHEM ABS Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
T	LOVDAHL MICHAEL J ET AL: "Synthesis and characterization of pregabalin lactose conjugate degradation products." JOURNAL OF PHARMACEUTICAL AND BIOMEDICAL ANALYSIS 1 JUNE, 2002, vol. 28, no. 5, 2002, pages 917-924, XP002235596 ISSN: 0731-7085 the whole document ----- -/--	1-7

☒ Further documents are listed in the continuation of box C.☐ Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

Date of the actual completion of the international search

24 July 2003

Date of mailing of the international search report

05/08/2003

Name and mailing address of the ISA

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Authorized officer

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	L.-C.MAILLARD: "Action des acides aminés sur les sucres; formation des mélanoides par voie méthodique" COMPTES RENDUS DES SEANCES DE L'ACADEMIE DES SCIENCES, vol. 154, 1912, pages 66-68, XP0008015418 PARIS, FR ISSN: 0764-4469 cited in the application the whole document	1-7
Y	----- KUMAR V ET AL: "MAILLARD REACTION AND DRUG STABILITY" MAILLARD REACTIONS IN CHEMISTRY, FOOD AND HEALTH, 1994, pages 20-27, XP008015416 cited in the application the whole document	1-7
Y	----- WIRTH DAVID D ET AL: "Maillard reaction of lactose and fluoxetine hydrochloride, a secondary amine." JOURNAL OF PHARMACEUTICAL SCIENCES, vol. 87, no. 1, January 1998 (1998-01), pages 31-39, XP002248910 ISSN: 0022-3549 schemes tables figures	1-7
Y	----- COLACO C A L S ET AL: "PHARMACEUTICAL FORMULATION INSTABILITY AND THE MAILLARD REACTION" CHIMICA OGGI, TEKNOSCIENZE, MILANO, IT, vol. 14, July 1996 (1996-07), pages 32-37, XP009008300 ISSN: 0392-839X cited in the application the whole document	1-7
Y	----- FIELD M J ET AL: "GABAPENTIN AND PREGABALIN, BUT NOT MORPHINE AND AMITRIPTYLINE, BLOCK BOTH STATIC AND DYNAMIC COMPONENTS OF MECHANICAL ALLODYNIA INDUCED BY STREPTOZOCIN IN THE RAT" PAIN, ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL, vol. 80, 1999, pages 391-398, XP000973130 ISSN: 0304-3959 abstract figures table 1 page 14, right-hand column, paragraph DISCUSSION - page 15, right-hand column ----- -/--	1-7

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB 02/00647

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>TAYLOR C P ET AL: "POTENT AND STEREOSPECIFIC ANTICONVULSANT ACTIVITY OF 3-ISOBUTYL GABA RELATES TO IN VITRO BINDING AT A NOVEL SITE LABELED BY TRITIATED GABAPENTIN"</p> <p>EPILEPSY RESEARCH, ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL, vol. 14, no. 1, 1993, pages 11-15, XP000646439 ISSN: 0920-1211 abstract figures page 394, left-hand column, last paragraph - page 397, left-hand column -----</p>	1-7

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

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Continuation of Box I.2

Claims Nos.: 1, 4-6 in part

Present claims 1 and 4-6 relate to a compound, a composition containing this compound and a method in which this compounds is used, where the compound is defined (inter alia) by reference to the following parameters:

P1: a conjugate

P2: a prodrug thereof

The use of the first parameter is incorrect: the compounds described in the present application are not conjugates of pregabalin and lactose, but a reaction product of the two. The use of this parameter in the present context is considered to lead to a lack of clarity within the meaning of Article 84 EPC.

By virtue of the use of the second parameter, the compound is defined by reference to a desirable characteristic or property, namely the possibility to form pregabalin in vivo.

The claims cover all compounds having this characteristic or property, whereas the application provides support within the meaning of Article 84 EPC and/or disclosure within the meaning of Article 83 EPC for none of such prodrugs. In the present case, the claims lack support, and the application lacks disclosure for the second parameter.

Consequently, the search has been carried out for those parts of the claims which appear to be clear, supported and disclosed, namely those parts relating to the products of the reaction between pregabalin and lactose.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/IB 02/00647

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
  
Although claims 5-7 are directed to a method of treatment of the human/animal body, a search has been carried out, based on the alleged effects of the compound/composition.
2. ☒ Claims Nos.: 1, 4-6 in part  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  
  
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.